

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

Claim 1. (Original) Stator core for an electrical machine, said stator core comprising:

an core back,

and a plurality of teeth arranged circumferentially at the core back and extending radially there from,

wherein the core back is at least one sheet of electrically insulated soft magnetic material arranged as a spiral.

Claim 2. (Original) Stator core according to claim 1, wherein the core back is annular.

Claim 3. (Currently Amended) Stator core according to claim 1, wherein said sheet of electrically insulated soft magnetic material is elongated and ~~have~~ has a length, a width, and a thickness, and

wherein the length of said sheet of electrically insulated soft magnetic material extends essentially circumferentially, the width of said soft magnetic material extends essentially axially, and the thickness of said soft magnetic material extends essentially radially.

Claim 4. (Original) Stator core according to claim 1, wherein said core back includes openings for receiving the teeth.

Claim 5. (Original) Stator core according to claim 4, wherein the sheet is elongated and includes an opening at each end of said sheet.

Claim 6. (Original) Stator core according to claim 1, wherein said sheet is fixed in the spiral shape by means of gluing, welding or soldering.

Claim 7. (Original) Stator core according to claim 4, wherein the teeth are arranged to be fastened in the openings by means of force fitting, gluing, welding or soldering.

Claim 8. (Original) Stator core according to claim 1, wherein the sheet is arranged to form three turns.

Claim 9. (Original) Core back for an electrical machine wherein the core back is at least one sheet of electrically insulated soft magnetic material arranged as a spiral.

Claim 10. (Original) Core back according to claim 9, wherein the core back is annular.

Claim 11. (Currently Amended) Core back according to claim 9, wherein said sheet of electrically insulated soft magnetic material is elongated and have has a length, a width, and a thickness, and

wherein the length of said sheet of electrically insulated soft magnetic material extends essentially circumferentially, the width of said soft magnetic material extends essentially axially, and the thickness of said soft magnetic material extends essentially radially.

Claim 12. (Currently Amended) Core back according to ~~any one of claims 9 to 11~~ claim 9, wherein said core back includes openings arranged to receive teeth, wherein said sheet is elongated and said openings are arranged not to cut the elongate edges of said sheet.

Claim 13. (Original) Core back according to claim 12, wherein the sheet is elongated and includes an opening at each end of said sheet.

Claim 14. (Original) Core back according to claim 9, wherein said sheet is fixed in the spiral shape by means of gluing or welding or soldering.

Claim 15. (Original) Core back according to claim 9, wherein the sheet is arranged to form three turns.

Claim 16. (Currently Amended) Method for producing a stator core for an electrical machine, comprising the ~~acts~~ steps of:

winding a sheet of electrically insulated soft magnetic material into a spiral in order to form a core back, and

attaching a plurality of teeth to the core back so that the teeth are circumferentially separated and ~~extends~~ extend radially from the core back.

Claim 17. (Currently Amended) Method according to claim 16, wherein the ~~aet~~ step of attaching a plurality of teeth to the core back comprises arranging the teeth into openings in the core back.

Claim 18. (Currently Amended) Method according to claim 16, wherein the ~~aet~~ step of attaching the teeth to the core back comprises force fitting, gluing, welding or soldering.

Claim 19. (Currently Amended) Method according to claim 16, further comprising the ~~aet~~ step of fixing the sheet in the shape of said spiral by means of gluing, welding or soldering.

Claim 20. (New) Core back according to claim 10, wherein said core back includes openings arranged to receive teeth, wherein said sheet is elongated and said openings are arranged not to cut the elongate edges of said sheet.

Claim 21. (New) Core back according to claim 11, wherein said core back includes openings arranged to receive teeth, wherein said sheet is elongated and said openings are arranged not to cut the elongate edges of said sheet.